

HANDBOOK OF PHONOLOGICAL DATA  
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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555 Javanese	555 Javanese	555 Javanese
555 01 p	18 n <sup>03</sup>	52 e [iota] <sup>60</sup>
555 02 p-breathy voice	19 n-palatal <sup>03</sup>	53 epsilon
555 04 t-dental	20 eng <sup>03</sup>	54 schwa <sup>32</sup>
555 05 t-dental-breathy voice	21 ɿ <sup>03</sup>	55 a
555 07 t	22 l-breathy voice <sup>03 33</sup> (limited)	56 u
555 08 t-breathy voice	23 r-trill <sup>03 04</sup>	57 o [upsilon] <sup>60</sup>
555 10 k	24 glottal stop <sup>30</sup>	58 o-open
555 11 k-breathy voice	25 h <sup>31</sup>	59 yod
555 13 t/s <sup>01</sup>		60 w [v] <sup>61</sup> (free)
555 14 t/s-breathy voice <sup>01</sup>		
555 16 s <sup>02</sup>		
555 17 m <sup>03</sup>	51 i	
555 \$a Javanese \$d West Indonesian \$e Java \$f 45 million \$g Merritt Ruhlen \$g William A. Foley (review) \$g John Crothers (editor)		
555 \$a Horne, Elinor C. \$b 1961 \$c Beginning Javanese \$g New Haven: Yale University Press		
555 \$a Uhlenbeck, E.M. \$b 1963 \$c Review of Beginning Javanese by E.C. Horne \$d Lingua 12.69-86		
555 \$a Uhlenbeck, E.M. \$b 1949 \$c De Structuur van het Javaanse Morpheem \$C The structure of the Javanese morpheme \$f Koninklijk Bataviasch Genootschap Van Kunsten en Wetenschappen: Verhandelingen: 78 \$g Bandoeng: A.C. Nix		
555 \$a Herrfurth, Hans \$b 1964 \$c Lehrbuch des Modernen Djawanisch \$f Lehrbuecher fuer das Studium der Orientalischen und Afrikanischen Sprachen.9 \$g Leipzig: VEB Verlag		
555 \$a BREATHY VOICE CONSONANTS \$a BREATHY VOICE VOWELS (NON-DISTINCTIVE) \$a LOWERED PITCH (NON-DISTINCTIVE) \$A The author describes the difference between /p/ and /p-breathy voice/ in terms of "light" consonants (/p/) vs. "heavy" consonants (/p-breathy voice/): "The light consonants are sharp and clear, while the heavy consonants have a murmured, fuzzy quality. In addition, the heavy consonants affect the vowel after them by making it a bit lower in pitch and giving it a breathy sound." (p.xxix) J.C. Catford (in Fundamental Problems in Phonetics, Indiana, 1977, p.203) indicates that the "heavy" consonants are voiceless, a point not contradicted anywhere by Horne. In other respects Catford seems to corroborate Horne.		
555 \$a INTONATION \$A "Sentences in Javanese, on the other hand, have certain characteristic accent patterns. Closely interwoven with sentence accent is sentence intonation--the pattern of itches, or 'tune' of a sentence.... Javanese speakers tend to accent the last syllable of an intonation group.... Sometimes, instead, they accent the next-to-last syllable. Most sentences have one accent to an intonation group, and if there is more than one such group, it is generally the predicate that receives the strongest accent.... It is generally true in Javanese, just as in English, that the highest pitch of a sentence coincides with the strongest accent, while other accented syllables also rise in pitch (though not so high as for strongly accented ones)." (p.xxvi)		
555 \$a PRENASALIZED STOPS \$A Horne analyzes prenasalized breathy voice stops as units. It is unclear why. Uhlenbeck (1963) points out that in intervocalic position they are clearly parallel to clusters of nasal + plain stop. Also, in word-initial position the nasal seems always to be a prefix. (Herrfurth, p.48ff) There are no morpheme initial clusters nasal + stop according to Uhlenbeck's (1949) lists. [JHC]		
555 \$a STRESS \$A "Javanese, unlike English, lacks word accent. It makes no difference which syllable of a Javanese word gets the loudest stress." (p.xxvi) Herrfurth, however, finds that stress falls on the penult, or final syllable if the penult has /schwa/. (p.19)		
555 \$a SYLLABLE \$A (C)(C)V(C) \$A Uhlenbeck (1949) lists a number of morpheme-initial clusters with		

C + /l, r-trill/. Also, in word-initial position, at least, clusters of nasal + homorganic breathy voice stop occur as the result of prefixation. (See Herrfurth, p.48ff.)

- 555 \$a VOWELS \$A The analysis of the vowel system given by Horne differs considerably from that suggested by Uhlenbeck (1949). The latter (p.30ff) gives only six vowel phonemes, assigning [epsilon, o-open] to /e, o/ respectively, and [iota, upsilon] to /i, u/ (rather than /e, o/, as done by Horne). Further [o-open] is also given by U. as an (overlapping) allophone of /a/. U's allophonic rules are as follows. Each vowel except /schwa/ has a higher and a lower variant, [i, e, o-open, u, ol and [iota, epsilon, a, upsilon, o-open] respectively. Word-finally the higher variants occur in open syllables, the lower in closed syllables. In the prefinal syllable (1) /a/ is realized as [o-open] if the final syllable is open and contains [o-open]. (A few types of intervening consonant clusters call for [a] instead.) Under any other conditions [a] occurs. (2) /e, o/ are realized as [epsilon, o-open] if the final syllable contains /i, u/ in open syllable or /schwa/ or an identical mid vowel in closed syllable, and also before limited types of consonant clusters. Otherwise [e, ol occur. (3) /i/ is realized as [iota] before certain consonant clusters, otherwise /i, u/ are realized as [i, ul. Loanwords and various expressive forms may violate these rules. [JHC]
- 555 01 \$A Exact place of articulation not specified for the affricates.
- 555 02 \$A /s/ is pronounced "like the 's' of 'see' but with the tongue pushed a little farther forward in the mouth, giving the [s] a slightly lisped quality." (p.xxxii)
- 555 03 \$A Exact quality of voicing not specified for the sonorants.
- 555 04 \$A /r-trill/ is described as "'rolled' 'r,' produced by vibrating the tongue tip against the alveolar ridge.... The more emphatically the person is speaking, the longer his 'r' sounds." (p.xxxii)
- 555 30 \$A "/glottal stop/, like /h/, occurs most frequently at the end of words." (p.xxxii)
- 555 31 \$A /h/ "occurs most commonly at the end of words - seldom at the beginning or in the middle. In its usual final position, it sounds like a breathy continuation of the vowel that precedes it." (p.xxxii)
- 555 32 \$A "In certain positions, [/schwa/] is pronounced very quickly or drops out altogether; this happens in the combination 'se-' at the beginning of words, and also in the sequences 'C.schwa.l' and 'C.schwa.r' at the beginning of words or in the middle of long words." (p.xxix)
- 555 33 \$A Uhlenbeck (1963, p.75) says that /l-breathy voice/ only occurs in one or two exclamations.
- 555 60 \$A The mid vowels are raised before a word-final consonant. (p.xxixf) (But see note on vowel system for alternate interpretation.)
- 555 61 \$A /w/ "occasionally at the beginning of a word may sound like the [v] of 'vat.'" (p.xxxii)